AMENDMENTS TO THE CLAIMS

Cancel claims 1-8 without prejudice. Please add claim 18 as follows:

1-8. (Cancelled)

9. (Original) A method for synchronizing distributed processors comprising the steps of:

establishing a socket-connection between at least two processors;

determining a roundtrip delay;

determining a roundtrip-delay threshold;

determining a current round-trip delay and an offset;

adding the current round-trip delay to a list of roundtrip delays;

determining a new roundtrip-delay threshold;

determining whether the current roundtrip delay is greater than the new threshold:

upon determining the current roundtrip delay to be greater than the new

threshold, determining whether a desired number of round-trip delays have

been determined;

upon determining that the current threshold is not greater than the new

threshold, determining whether the offset is greater than an offset

threshold;

adjusting a clock according to an offset; and

determining a linear regression.

10. (Original) The method of claim 9, wherein a probability of the round-trip delay being greater than the roundtrip-delay threshold is about 0.5 and a probability of the round-trip delay being less than the roundtrip-delay threshold is about 0.5

11. (Original) The method of claim 9, wherein the step of determining whether thirty round-trip delays have been determined further comprises the step of entering a synchronization method upon determining the desired number round-trip delays.

12. (Original) The method of claim 9, wherein the step of determining whether thirty round-trip delays have been determined further comprises the step of determining a current round-trip delay and an offset upon determining less than the desired number delays.

13. (Original) The method of claim 9, wherein the step of adjusting a clock according to an offset further comprises the steps of:

decrementing by an update-interval upon determining the offset to be greater than the offset threshold; and

incrementing by the update-interval upon determining the offset to be less than the offset threshold.

14. (Original) The method of claim 9, further comprising the step of determining, recursively, a current round-trip delay and an offset.

15. (Original) The method of claim 9, wherein the step of determining a linear regression further comprises the steps of:

setting a current synchronization time;

determining whether a number of measured offsets is greater than a desired number:

upon determining that the number of offsets is greater than the desired number, removing an oldest offset from a list of offsets and adding a current offset to the list and determining parameters of a regression line from the list of offsets;

upon determining that the number of measured offsets is not greater than the desired number, adding the current offset to the list;

estimating the current offset using the regression line;

incrementing the current synchronization time; and

determining whether the current synchronization time is greater than an update-interval:

upon determining the current synchronization time to be less than the update-interval, estimating the current offset using the regression line;

upon determining the current synchronization time to be greater than the update-interval, measuring a current roundtrip delay and offset.

16. (Original) The method of claim 9, wherein the desired number of roundtrip delays is thirty.

17. (Original) A system for synchronizing distributed processors comprising:

a first processor connected to a network, wherein the first processor sends a sync-request message comprising a time current local time of the first processor; and

a second processor connected to the network and connected to the first processor via the network, wherein the server receives the sync-request message, and stores a time of arrival of the sync-request message and sends a sync-response message the first processor, wherein the sync-response message comprises the current local time of the first processor, the time of arrival and a current local time to the second processor.

18. (New) The system of claim 17, wherein the second processor receives the sync-response message and stores the time of arrival of the sync-request message and a current local time to the second processor, and further stores a time of arrival of the sync-response.